

WORK SHEET FOR STEPWISE CALCULATION

(SUBSURFACE) PRESSURE (P_f & P_s)
~~(SURFACE)~~

Form C-122-E
Adopted 9-1-65

COMPANY Adobe Oil Company LEASE Smith Federal WELL NO. 1 DATE 10/21/72

LOCATION: Unit G Section 14 Township 23 S Range 24 E

L 9874 H 9874 L/H 1.000 G .587 % CO₂ .0011 % N₂ .0029 % H₂S .09 Gr/CCF

Q_m Annulus 0046007 Q_m 0.817 M²cfd (L/H) (F_rQ_m)² .000014 P_{cr} 672 T_{cr} 350

$P = \frac{652.050}{1016.357} + 2534.2 = 641.6 + 2534.2 = 3175.8$

LINE	ITEM	SOURCE	1	2	3	4	5	6	7	8	9	10
1	H		0	4937		9874						
2	GH		0	2898		5796						
3	37.5GH		0	108,675		217,350						
4	P _c or P _n		2534.2	2880.0	2867.5	3199.6	3178.0	3176.9				
5	P _r		3.77	4.29	4.27	4.76	4.73	4.73				
6	T		520	577.5	577.5	635	635	635				
7	T _r		1.49	1.65	1.65	1.81	1.81	1.81				
8	Z		.766	.843	.842	.907	.907	.907				
9	P/Z P/Z	4-8	3308.4	3416.4	3405.6	3527.7	3503.9	3502.6				
10	P/TZ	9-6	6.3623	5.9158	5.8971	5.5554	5.5180	5.5159				
11	(P/TZ) ² /1000	(10 ² /1000)	.040479	.034997	.034776	.030862	.030448	.030425				
12	L/H(F _r Q _m) ²		.000014	.000014	.000014	.000014	.000014	.000014				
13		11 + 12	.040493	.035011	.034790	.030876	.030462	.030439				
14	I _n	10-13	157.121	168.970	169.506	179.926	181.143	181.212				
15	M=P _n ·P _{n-1}			345.8	333.3	332.1	310.5	309.4				
16	N=I _n + I _{n-1}			326.091	326.627	349.432	350.649	350.718				
17	M x N	15 x 16			108,865			108,512				
18	Σ (M x N)	Σ 17			108,865			217,377				